

eMOLT

Winter-Spring 2006

Update

Standard Protocol

So far, we have been experimenting with various methods to collect and document data but now it is time to settle on a simple system that works and one that can be maintained for years to come with little or no funding. Here is the new eMOLT protocol in four easy steps:

1. We, the administrators, mail you a package soon after New Years that includes a:
 - a. one-page newsletter (like this one)
 - b. ready-to-be-deployed temperature probe
 - c. log sheet (see attached)
 - d. self-addressed envelope
2. **You** then mail (if you haven't already) your probe & completed log sheet from the previous year to us using the self-addressed envelope we sent you
3. We process your data and mail you another package with hardcopy plots
4. We meet those that are able to attend either the Mass Lobstermen's Weekend or the Maine Fish Forum to discuss the data
5. We send you another newsletter mid-season and remind you to get your probes in the water.

Documentation

At the very least, the log sheet should document the position the probe was located, the approximate depth at mean high water, and the date it was deployed and recovered. We **NO LONGER REQUIRE** the date of each haul as long as you are keeping the probe within a half mile of the nominal position and the depth does not change by more than 5%. So, for example, if your site is in 100 feet of water, we consider data from 95-105 feet as being at that site. Otherwise, it should be documented as another site. The "position" should be given in Lorans (to the nearest 10th of a microsecond) **or** latitude/longitude (in degrees-minutes to the nearest tenth of a minute). The lat/lon format is preferred. The depth can be given in fathoms or feet but feet is now preferred.

Participants should be aware of their standard eMOLT sites and should try to maintain those sites for years to come. We are not actively looking for new sites but would like to maintain the ones we have occupied in the past years. Each time we send you hardcopy plots we also send a listing of your eMOLT sites. Please check the positions and depths we have printed for you.

Valuable year-round data

Some participants provide year-round data by maintaining a mooring through the winter even when they are not actively fishing in those months. This data is much appreciated. As we attempt to detect changes in the seasonal temperature cycles, we hope others will consider doing so as well.

Optional protocol for documenting catch

A small percentage (~10%) of participants have been including catch information on their log sheet. We have been attempting to enter this data and then provide basic overlays of temperature vs catch. We will continue to accept and process this catch data but only if we get it in electronic spreadsheet form. The protocol for doing so is posted on the emolt.org website under "Manuals for Participants". See complete instructions.

Battery Life of Probes

Please keep in mind that we are nearing the end of battery life for some probes. All of them have little blinking lights to indicate they are still alive so, if you notice any not blinking, please send it in to get replaced. We have enough new probes to keep us supplied for a few more years.

“Realtime-temperature” probe development

The ADC engineers are still developing a probe that will send data wirelessly to the wheelhouse and satellite with each haul. They are looking for feedback from fishermen that may be interested in getting this data and as to how they might use this information. If you are interested in this technology, please call Eric VanEvery at 607-533-3531.

Pressure Sensors

Many more of you will be set up with probes that record pressure (ie water depth) in addition to temperature. This has been helpful in interpreting variations related to depth-dependent temperature changes. In other words, we are able to quantify the degree of temperature change associated with traps falling in multiple depth zones vs that associated with time-varying events.

emolt.org

We are always looking for ways to improve the project website. So, if there is something you would like to see there, please let us know. You can call 508-495-2211 at any time.

IMPORTANT NOTE:

If you ever find yourself without a probe, please call us. We can't always keep track of who has one and who doesn't!

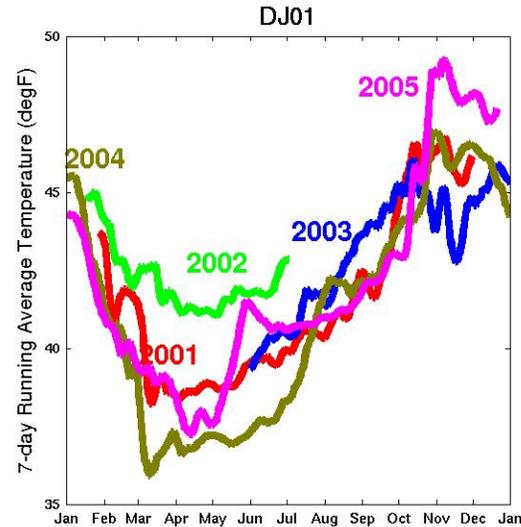


Figure 1. David Johnson's 52 fathom observation of relatively warm Nov/Dec 2005.

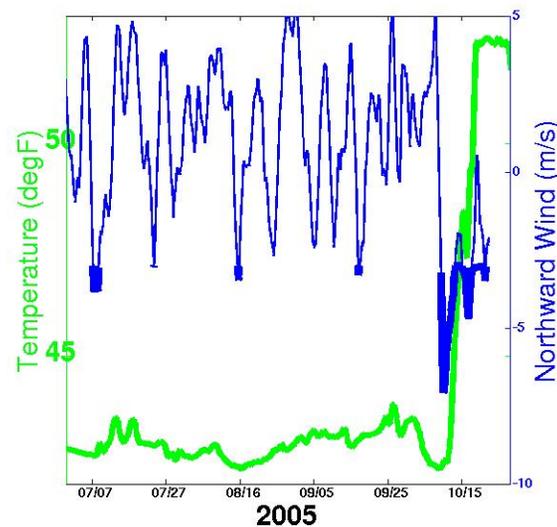


Figure 2. Dave Kandrick's 20 fathom observation of the wind-generated Mass Bay turnover in 2005.

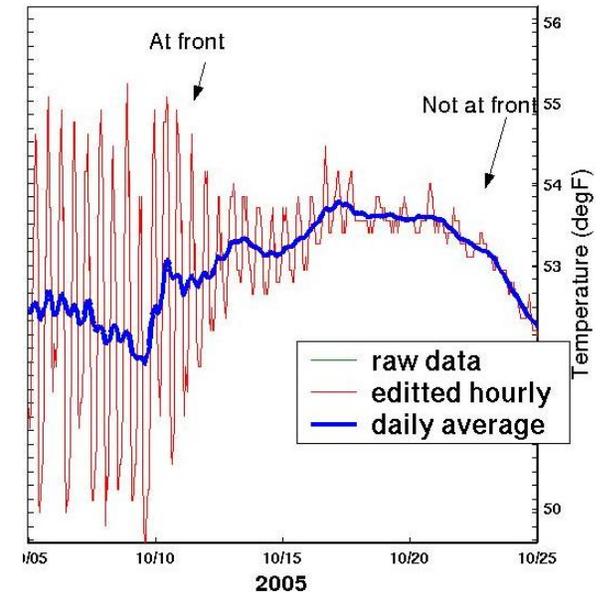


Figure 3. Therese Sauvageau's 8 fathom observation of thermocline breakdown after storm. Prior to the storm she observed 5 degF tidal variations.